

BEFORE

THE PUBLIC SERVICE COMMISSION OF

SOUTH CAROLINA

DOCKET NO. 2020-1-E - ORDER NO. 2020-

JUNE , 2020

IN RE: Annual Review of Base Rates for Fuel
 Costs of Duke Energy Progress, LLC

)
) **PROPOSED ORDER**
) **APPROVING AND ADOPTING**
) **ADJUSTMENT IN FUEL COST**
) **RECOVERY FACTORS**
)

This matter comes before the Public Service Commission of South Carolina (“Commission”) on the annual review of base rates for fuel costs of Duke Energy Progress, LLC (“DEP” or “Company”). The procedure followed by the Commission is set forth in S.C. Code Ann. § 58-27-865 (2015), which provides for annual hearings to allow the Commission and all interested parties to review the prudence of the fuel purchasing practices and policies of an electrical utility and for the Commission to determine if any adjustment in a utility’s fuel cost recovery mechanism is necessary and reasonable. Additionally, pursuant to S.C. Code Ann. § 58-39-140 (2015), the Commission must determine whether to increase or decrease the fuel cost component designed to recover the incremental or avoided costs incurred by the Company to implement the Distributed Energy Resource Program (“DERP”) previously approved by the Commission.

I. PROCEDURAL HISTORY

By letter dated December 9, 2019, the Clerk's Office of the Commission instructed the Company to publish a Notice of Hearing and Pre-file Testimony Deadlines ("Notice") in

newspapers of general circulation by March 2, 2020, and to provide Proof of Publication by March 23, 2020. The letter also instructed the Company to furnish the Notice to each affected customer on or before March 2, 2020, and provide a certification to the Commission that the Notice had been furnished by March 23, 2020.¹ The Notice indicated the nature of the proceeding and advised all interested parties of how to participate in this proceeding and of important deadlines. On January 16, 2020, the Company filed with the Commission an affidavit of publication of the Notice. On March 23, 2020, the Company filed affidavits that the Notice had been timely furnished to all customers.

The Commission received petitions to intervene from the South Carolina Coastal Conservation League (“CCL”), the Southern Alliance for Clean Energy (“SACE”), and Nucor Steel – South Carolina (“Nucor”), which were granted.² The South Carolina Office of Regulatory Staff (“ORS”) is automatically a party pursuant to S.C. Code Ann. § 58-4-10(B) (Supp. 2019).

II. JURISDICTION OF THE COMMISSION

In accordance with S.C. Code Ann. § 58-27-140(1) (2015), the Commission may, upon petition, “ascertain and fix just and reasonable standards, classifications, regulations, practices or service to be furnished, imposed, observed, and followed by any or all electrical utilities.” Further, S.C. Code Ann. § 58-27-865(B) (2015) states, in pertinent part, that “[u]pon conducting public hearings in accordance with law, the commission shall direct each company to place in effect in its base rate an amount designed to recover, during the succeeding twelve months, the fuel costs

¹ After the Company advised the Commission that approximately 12,500 customers were not initially provided the Notice, the Commission granted the Company permission to furnish the Notice to these customers by a separate mailing along with a short explanation of the circumstances. Order No. 2020-139.

² Order Nos. 2020-246 and 2020-301.

determined by the commission to be appropriate for that period, adjusted for the over-recovery or under-recovery from the preceding twelve-month period.”

Consistent with the requirements of S.C. Code Ann. § 58-27-865(B), the Commission convened an evidentiary hearing to determine the reasonableness of the Company’s proposed rates to recover fuel costs.

III. DISCUSSION OF THE HEARING

Pursuant to Order No. 2020-399, the public evidentiary hearing was held virtually on June 9, 2020, before the Commission with the Honorable Florence P. Belser presiding. Representing the Parties and appearing before the Commission in this Docket were Samuel J. Wellborn, Esquire, and Katie M. Brown, Esquire, for the Company; J. Blanding Holman, IV, Esquire, Kurt D. Ebersbach, Esquire, and Katherine N. Lee, Esquire, for SACE/CCL; Robert R. Smith, II, Esquire, and Michael K. Lavanga, Esquire, for Nucor Steel – South Carolina; and Christopher M. Huber, Esquire, and Andrew M. Bateman, Esquire, for ORS.

At the outset of the hearing, DEP and SACE/CCL each moved to strike portions of the other’s prefiled testimony. Counsel for DEP asserted that SACE/CCL witness Gregory Lander’s surrebuttal testimony at page 2, lines 5 through 19, and page 3, line 12, through page 4, line 13, went beyond Company witness James McClay’s rebuttal testimony. Counsel for SACE/CCL asserted that witness McClay’s rebuttal at page 7, lines 12 through 15, went beyond witness Lander’s direct testimony. The Commission took the matter under advisement and permitted the movants to file post-hearing briefs.

The Company and ORS presented witnesses regarding the Company’s base rates for fuel costs. SACE/CCL presented a witness on natural gas fuel costs and data tracking and reporting. No other parties filed testimony.

A. Company Testimony

The Company presented the direct testimonies of Kevin Y. Houston, Kelvin Henderson, Jason D. Martin, and Dana M. Harrington, the amended direct testimonies of John A. Verderame and Julie K. Turner, and the rebuttal testimony of James J. McClay. With the exception of that portion of witness McClay's testimony that SACE/CCL moved to strike, the pre-filed testimony of all DEC witnesses offered into the record was accepted into the record without objection. The exhibits to the Company's pre-filed testimony that were offered into the record were accepted without objection, marked as Hearing Exhibits 1 through 7, and entered into the record.³

Company witness Houston testified regarding the Company's nuclear fuel purchasing practices, provided costs for the period of March 1, 2019 through February 29, 2020 ("Review Period"), and described changes forthcoming for the period July 1, 2020 through June 30, 2021 ("Billing Period").

Company witness Verderame testified regarding the Company's fossil fuel purchasing practices, provided actual fuel purchasing costs for the Review Period and the prior review period of March 1, 2018 to February 28, 2019, and described related changes forthcoming in the Billing Period relating to trends in market conditions and projected fossil fuel consumption and costs.

Company witness McClay provided additional background on the management of natural gas supply and transportation capacity on behalf of DEP and Duke Energy Carolinas, LLC ("DEC") (collectively "Companies") and responded to the testimony and recommendations

³ Hearing Exhibit 1 consists of Amended Direct Testimony Exhibits 1 and 2 of witness Houston; Hearing Exhibit 2 consists of Direct Testimony Exhibits 1 and 2 of witness Verderame; Hearing Exhibit 3 consists of witness McClay's Rebuttal Exhibit 1; Hearing Exhibit 4 consists of public Direct Testimony Exhibits 1 and 2 of witness Henderson; Hearing Exhibit 5 consists of the confidential Direct Testimony Amended Exhibit 3 of witness Henderson and was accepted into the record under seal; Hearing Exhibit 6 consists of the Direct Testimony exhibit of witness Martin; Hearing Exhibit 7 consists of the fourteen (14) Direct Testimony exhibits of witness Harrington.

offered by Gregory Lander on behalf of SACE/CCL. Witness McClay addressed the Company's natural gas supply and transportation capacity management, witness Lander's load factor utilization analysis, the sufficiency of natural gas capacity to serve the Companies' combined cycle units, and the feasibility and risks of monetizing unused capacity. Witness McClay also addressed discovery and procedural matters raised by witness Lander relating to hourly generation and gas delivery data and the availability for discovery within the context of the procedural schedule in this case.

Company witness Turner testified regarding the Company's fossil/hydro/solar generation portfolio and changes made since the prior year's filing, changes expected in the near term, and the performance of the Company's fossil/hydro/solar generation facilities during the Review Period. Witness Turner also provided information on significant fossil/hydro/solar outages that occurred during the Review Period and provided information concerning environmental compliance efforts.

Company witness Henderson discussed the performance of the Company's nuclear fleet during the Review Period.⁴ Witness Henderson reported to the Commission that the Company achieved a net nuclear capacity factor, excluding reasonable outage time, of 101.97% for the Review Period, which exceeds the 92.5% set forth in S.C. Code Ann. § 58-27-865.

Company witness Martin testified regarding DERP costs that are incorporated into the proposed fuel factors by Company witness Harrington. Company witness Martin also provided information on the nature of the costs filed as well as any changes made to the DERP portfolio

⁴ Pursuant to the Company's request, Commission Order No. 2020-339 ordered that Exhibit 3 of DEP witness Henderson' testimony be treated as confidential. During the hearing, this treatment was also extended to witness Henderson's Amended Exhibit 3.

since the previous fuel proceeding. Additionally, Company witness Martin sponsored the Company’s revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet, filed as Martin Exhibit 1. Martin Table 5 detailed the value of Net Energy Metering (“NEM”) Distributed Energy Resources by component:

Components of NEM Distributed Energy Resource Value	Component value (\$/kWh) Residential PV⁵	Component value (\$/kWh) SGS PV⁵	Component value (\$/kWh) Large PV⁵
Marginal Energy Cost	\$0.024878	\$0.024890	\$0.024894
Marginal Capacity Cost	\$0.001661	\$0.001634	\$0.001657
Ancillary Services	(\$0.002390)	(\$0.002391)	(\$0.002391)
T&D Capacity	\$0.000000	\$0.000000	\$0.000000
Avoided Criteria Pollutants ⁶	\$0.000028	\$0.000027	\$0.000025
Avoided CO2 Emissions Cost (currently zero)	\$0.000000	\$0.000000	\$0.000000
Fuel Hedge ⁷	\$0.000000	\$0.000000	\$0.000000
Utility Integration & Interconnection Costs	\$0.000000	\$0.000000	\$0.000000
Utility Administration Cost	\$0.000000	\$0.000000	\$0.000000
Environmental Costs	\$0.000000	\$0.000000	\$0.000000
Subtotal	\$0.024177	\$0.024160	\$0.024185
Line Losses ⁸	\$0.000272	\$0.000272	\$0.000273
Total Value NEM Distributed Energy Resource	\$0.024449	\$0.024431	\$0.024459

⁵ “Residential PV” refers to a load shape reflecting generation installed by a residential customer. “SGS PV” refers to a load shape reflecting generation installed by a small commercial/industrial customer served under Small General Service Schedule SGS. “Large PV” refers to a load shape reflecting generation installed by a customer with higher consumption requirements and applies to all other nonresidential schedules. The Company has separated the values for residential customers (“Residential PV”) and small commercial/industrial customers (“SGS PV”) as a result of available actual metered solar load profile data for the residential class. The Company continues to utilize third-party solar load profile data for non-residential customers.

⁶ Avoided Criteria Pollutants reflects NOx and SOx that have been separately identified from approved marginal energy costs.

⁷ Pursuant to the Settlement Agreement reached in DEP’s 2016 annual fuel proceeding (Docket No. 2016-3-E), the Company has calculated the hedge value and determined that no fuel hedge exists; therefore, the value indicated is zero.

⁸ Line loss factors are 1.281% for on-peak marginal energy, 1.268% for off-peak marginal energy and 1.874% for marginal capacity per DEP’s updated 2018 line loss analysis based upon 2018 cost of service.

Company witness Harrington’s direct testimony addressed the Company’s actual fuel, capacity-related costs, including Public Utility Regulatory Policies Act of 1978 (“PURPA”) capacity, environmental, and DERP cost data for the Review Period, the estimated fuel, capacity-related costs, environmental, and DERP cost information for March 1, 2020 through June 30, 2020, and the Company’s proposed fuel factors by customer class for the Billing Period. Company witness Harrington testified that the environmental cost component allocations were consistent with Order No. 2007-440, that the capacity component was allocated in accordance with Order No. 2015-843, and that all fuel rate components were allocated in accordance with Act 236.

Company witness Harrington provided fourteen (14) exhibits to support her direct testimony. The rates and monthly charges proposed by the Company in this proceeding are reflected on Harrington Exhibit No. 1, summarized in-part as follows:

Customer Class	Base Fuel Cost Component (¢/kWh)	Environmental Cost Component (¢/kWh)	Capacity Related Cost Component (¢/kWh)	DERP Avoided Cost Component (¢/kWh)	Total Fuel Factor (¢/kWh)
Residential ⁹	1.901	0.021	0.532	0.002	2.456
General Service (non-demand)	1.887	0.012	0.358	0.001	2.258
General Service (demand)	1.887	_ ¹⁰	_ ¹¹	_ ¹²	1.887
Lighting	1.887	0.0	0.0	0.0	1.887

Company witness Harrington discussed the Company’s approved DERP, associated costs and the DERP NEM Incentive. Witness Harrington testified that the Company seeks approval for the monthly DERP incremental costs amounting to a per-account monthly charge (“DERP

⁹ The Residential components include the Residential Energy Conservation Discount adjustment factor of 0.7179%.

¹⁰ The Proposed General Service (demand) Environmental Component is 6 cents per kW.

¹¹ The Proposed General Service (demand) Capacity Component is 108 cents per kW.

¹² The Proposed General Service (demand) DERP Avoided Cost Component is 2 cents per kW.

Charge”) of \$1.00, \$3.69, and \$100.00 for South Carolina residential, commercial, and industrial customers, respectively, including Gross Receipts Tax.

Company witness Harrington stated that the impact of all components of the Company’s filing for an average residential customer using 1,000 kWh per month is a decrease of \$4.11, or 3.5 percent. Company witness Harrington stated that the average decrease anticipated in the average monthly bill of General Service (non-demand), General Service (demand) and Lighting customers is 1.9 percent, 2.3 percent, and 0.5 percent, respectively.

B. SACE/CCL Testimony

Following the presentation of the Company’s witnesses, SACE/CCL presented the pre-filed direct and surrebuttal testimonies of Gregory Lander. Apart from the two (2) portions of witness Lander’s surrebuttal testimony that DEP moved to strike, SACE/CCL witness Lander’s prefiled testimonies were accepted into the record without objection, with the confidential version of witness Lander’s pre-filed direct testimony entered into the record under seal. Witness Lander’s public direct testimony exhibits 1, 2, 3 and 5 were marked as Hearing Exhibit 8 and entered into the record of the case. The confidential and public versions of exhibit 4 to witness Lander’s direct testimony were marked as Hearing Exhibit 9, with the public version entered into the record and the confidential version entered into the record under seal. SACE/CCL witness Lander testified regarding i) the load factor utilization of DEP and DEC’s existing contracted natural gas pipeline capacity over the Review Period; ii) the sufficiency of the Companies’ existing capacity to serve its natural gas-fired combined cycle plants and combustion turbine peaking plants; iii) recommendations related to the apparent lack of monetization of the Companies’ idle natural gas pipeline capacity when demand for gas-fired generation is less than contracted firm capacity; and iv) recommendations for the Commission to require more useful Companies-supplied data in

future Fuel Factor proceedings and to allow additional time between the filing date for Company direct testimony and the deadline for other parties' direct testimony.

C. ORS Testimony

Following the presentation of the Company's witnesses and SACE/CCL's witness, ORS presented the direct testimonies of Anthony D. Briseno, Brandon S. Bickley, Anthony M. Sandonato, and Robert A. Lawyer. The pre-filed direct testimony of all ORS witnesses was accepted into the record without objection and the ORS witnesses' exhibits were marked as Hearing Exhibits 10 through 13 and were entered into the record of the case.

ORS witness Briseno presented direct testimony and ten (10) exhibits, which demonstrated the results of ORS's examination of the Company's books and records pertaining to operations under the Fuel Adjustment Clause for the Review Period.¹³ Witness Briseno testified that based on ORS's examination, ORS agrees with the balances and the adjustments as put forth by the Company as of the end of the Review Period. ORS agrees with the following cumulative (over)/under-recovery balances as calculated by the Company:

- February 2020 base fuel cost under-recovery balance of \$8,184,894;
- February 2020 environmental cost component over-recovery balance of \$86,728;
- February 2020 capacity cost component under-recovery balance of \$2,280,576;
- February 2020 DERP incremental under-recovery balance of \$45,020;
- February 2020 DERP avoided cost under-recovery balance of \$12,641;
- June 2020 estimated base fuel cost under-recovery balance of \$3,825,487;

¹³ Composite Hearing Exhibit 10 consists of the Direct Testimony Exhibits of Anthony D. Briseno (Audit Exhibits ADB-1 through ADB-10).

- June 2020 estimated environmental cost component over-recovery balance of \$605,879;
- June 2020 estimated capacity cost component under-recovery balance of \$2,126,331;
- June 2020 estimated DERP incremental cost under-recovery balance of \$245,727; and
- June 2020 estimated DERP avoided cost under-recovery balance of \$36,574.

ORS witness Bickley presented direct testimony and six (6) exhibits.¹⁴ Witness Bickley testified regarding ORS's examination of the Company's power plant operations and to nuclear, fossil and hydro generation performance, generation mix, plant dispatch, and forecasted power plant operations.

ORS witness Sandonato presented direct testimony and five (5) exhibits.¹⁵ Witness Sandonato testified regarding the Company's fuel expenses and ORS's examination relating to the Company's fuel expenses, fossil and nuclear fuel procurement, fuel transportation, environmental compliance-related costs, purchased power and the Company's policies and procedures. Witness Sandonato also testified regarding ORS's review of the Company's forecasted fuel-related costs and sales. Witness Sandonato testified that should the Commission approve the rates proposed by the Company, the average monthly bill for a residential customer on Rate RS using 1,000 kWh would decrease by \$4.11, or 3.5 percent.

ORS witness Lawyer presented direct testimony and one (1) exhibit.¹⁶ Witness Lawyer testified regarding the ORS's recommendations resulting from the examination of the Company's DERP expenses for March 2019 through June 2021. Specifically, witness Lawyer testified

¹⁴ Composite Hearing Exhibit 11 consists of the Direct Testimony Exhibits of Brandon S. Bickley (Exhibits BSB-1 through BSB-6).

¹⁵ Composite Hearing Exhibit 12 consists of the Direct Testimony Exhibits of Anthony M. Sandonato (Exhibits AMS-1 through AMS-5).

¹⁶ Hearing Exhibit 13 consists of the Direct Testimony Exhibit of Robert A. Lawyer (Exhibit RAL-1).

regarding the Company's DERP avoided and incremental costs, the method by which the Company proposed to recover those costs, the Company's calculation of the NEM incentive, and the Company's modification to the Renewable Net Metering Rider. ORS found the Company's DERP avoided and incremental costs to be reasonably and prudently incurred in implementing the Company's DERP and the Company's estimated and forecasted DERP avoided and incremental costs to be reasonable. ORS found the Company's calculation of the proposed DERP Charge and of the under-collected incremental costs complied with Act 236 and the Commission's orders in previous DERP-related proceedings. Exhibit RAL-1 reflects the under-recovered and total estimated forecasted incremental costs.

IV. FINDINGS OF FACT AND CONCLUSIONS OF LAW

Having heard the testimony of the witnesses and representations of counsel and after careful review of the proposed orders, post-hearing briefs, and record, the Commission finds that approval of the rates and monthly charges proposed by the Company in this proceeding are consistent with the standards for fuel review proceedings conducted pursuant to S.C. Code Ann. § 58-27-865, and are supported by the substantial evidence in the record. The rates and monthly charges proposed by the Company are calculated to allow recovery in a precise and prompt manner while assuring public confidence and minimizing abrupt changes in charges to customers. As such, approval of these rates and monthly charges is in the public interest in this case. The Commission further finds that the Company's proposed rates and monthly charges provide stabilization to the fuel factors, minimize fluctuations for the near future, and do not appear to inhibit economic development in South Carolina.

The Commission finds that the methodology for determining the environmental cost component of the fuel factors and the methodology for allocation and recovery of the avoided

capacity component used by the Company in this proceeding are consistent with the statutory requirements of S.C. Code Ann. § 58-27-865 and Order No. 2007-440 and are just and reasonable.

The Commission finds that the fuel factors as calculated in Harrington Exhibit 1 are lawful, just, and reasonable.

The Commission finds that the 2020 component values for the NEM Distributed Energy Resource, as shown in Table 5 in the testimony of Company witness Martin, comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. §§ 58-40-10 *et seq.*

The Company's calculation and method of accounting for DERP avoided and incremental costs during the Review Period were reasonable and prudent, and were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. §§ 58-40-10 *et seq.*

The Commission finds that the revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet reflected in Martin Exhibit 1 are lawful, just and reasonable.

The Commission finds that the DERP Charges as indicated in Harrington Exhibit 1 at line 26, are reasonable and comply with S.C. Code Ann. §§ 58-27-865, 58-39-140 and 58-39-150.

IT IS THEREFORE ORDERED THAT:

1. The pre-filed testimonies of ORS witnesses Anthony D. Briseno, Brandon S. Bickley, Anthony M. Sandonato, and Robert A. Lawyer, the pre-filed testimonies of SACE/CCL witness Gregory Lander, and the pre-filed testimonies of Company witnesses Kevin Y. Houston, John A. Verderame, James J. McClay, Kelvin Henderson, Julie K. Turner, Dana M. Harrington, and Jason D. Martin, along with their respective exhibits entered into evidence as Hearing Exhibits

1 through 13, are accepted into the record. The oral testimony of these witnesses provided at the hearing on June 9, 2020, is also incorporated into the record of this case.

2. The fuel purchasing practices, plant operations, and fuel inventory management of the Company related to the historical fuel costs and revenues as of the end of the Review Period, are prudent. However, with regard to plant outages not complete as of the end of the Review Period, and plant outages where final reports or investigations (Company, contractor, government reports or otherwise) were not available at the time of the hearing on this matter, the reasonableness of such outages shall be subject to review in the period where such report(s) become available.

3. The methodologies used by the Company to calculate its avoided energy and capacity costs under PURPA for the Review Period and Billing Period are reasonable and prudent.

4. The Company's revisions to the 2020 Renewable Net Metering Rider RNM tariff sheet, attached hereto as Order Exhibit 1, are lawful, just and reasonable, and shall become effective for service rendered during the Billing Period.

5. The Company's calculation and method of accounting for avoided and incremental costs for NEM during the Review Period were reasonable and prudent, and were consistent with the methodology approved in Commission Order No. 2015-194, and complied with S.C. Code Ann. §§ 58-40-10 *et seq.*

6. The 2020 component values for NEM Distributed Energy Resource comply with the NEM methodology approved by the Commission in Order No. 2015-194 and satisfy the requirements of S.C. Code Ann. §§ 58-40-10 *et seq.*

7. The Company shall set its Residential base fuel factor at 1.901 cents per kWh (not including applicable environmental, capacity-related, and DERP avoided cost components)

effective for service rendered during the Billing Period.¹⁷ The Company shall set its General Service (non-demand), Lighting, and General Service (demand) base fuel factors at 1.887 cents per kWh (not including applicable environmental, capacity-related, and DERP avoided cost components) effective for service rendered during the Billing Period.¹⁸

8. The Company shall set its environmental component billing factor at 0.021 cents per kWh for the Residential class, 0.012 cents per kWh for the General Service (non-demand) class, 0.0 cents per kWh for Lighting class, and 6 cents per kW for the General Service (demand) class for service rendered during the Billing Period.

9. The Company shall set its capacity-related component at 0.532 cents per kWh for the Residential class, 0.358 cents per kWh for the General Service (non-demand) class, 0.0 cents per kWh for Lighting class, and 108 cents per kW for the General Service (demand) class for service rendered during the Billing Period.

10. The Company shall set its DERP avoided cost component at 0.002 cents per kWh for the Residential class, 0.001 cents per kWh for the General Service (non-demand) class, 0.0 cent per kWh for Lighting class, and 2 cents per kW for the General Service (demand) class for service rendered during the Billing Period.

11. The Company shall set its DERP Charge at \$1.00/month for the Residential class, \$3.69/month for the Commercial class, and \$100.00/month for the Industrial class, including Gross Receipts Tax and regulatory fees.

¹⁷ The Residential components in ordering paragraphs 7 through 10 include the Residential Energy Conservation Discount adjustment.

¹⁸ The base fuel factors, environmental component billing factor, avoided capacity component, and DERP avoided cost component do not include Gross Receipt Tax and regulatory fees.

12. The Company shall file the South Carolina Retail Adjustment for Fuel, Variable Environmental, and Avoided Capacity Costs Rider and all other retail Tariffs with the Commission and a copy with ORS within ten (10) days of receipt of this Order.

13. The Company shall comply with the notice requirements set forth in S.C. Code Ann. § 58-27-865.

14. The Company shall continue to utilize the methodology for developing the environmental component billing factor for each rate class to recover “variable environmental costs” under S.C. Code Ann. § 58-27-865(A)(1) approved in Order No. 2007-440. Pursuant to S.C. Code § 58-27-865(A)(1), the avoided capacity component of purchased power costs and other capacity costs that are permitted to be recovered through the fuel factor, are to be allocated and recovered from customers under a separate capacity component of the overall fuel factor based on the same method that is used by the utility to allocate and recover variable environmental costs.

15. The Company shall continue to file the monthly reports as previously required.

16. The Company shall continue to examine and make adjustments as necessary to its natural gas hedging program in light of the potentially reduced volatility in the domestic natural gas market. The Company shall also provide monthly natural gas hedging reports to ORS.

17. The Company shall, by rate class, account monthly to the Commission and ORS for the differences between the recovery of fuel costs through base rates and the actual fuel costs experienced by booking the difference to unbilled revenues with a corresponding deferred debit or credit.

18. The Company shall submit monthly reports to the Commission and ORS of fuel costs and scheduled and unscheduled outages of generating units with a capacity of 100 megawatts or greater.

19. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

Florence P. Belser, Vice-Chairman

ATTEST:

Jocelyn G. Boyd, Executive Director

(SEAL)

Duke Energy Progress, LLC
(South Carolina)

SC Rider RNM-~~89~~
Supersedes Rider RNM-~~78~~

RENEWABLE NET METERING RIDER RNM-~~89~~

AVAILABILITY

Available to residential and nonresidential Customers receiving concurrent service from Company, on a metered rate schedule, except as indicated under General Provisions. A customer-generator is a owner, operator, or lessee of an electric generation unit that generates or discharges electricity from a renewable energy resource, including an energy storage device configured to receive electrical charge solely from an onsite renewable energy resource. The renewable net energy metered (NEM) generation, which includes a solar photovoltaic; solar thermal; wind powered; hydroelectric; geothermal; tidal or wave energy; recycling resource; hydrogen fueled or combined heat and power derived from renewable resources; or biomass fueled generation source of energy, is installed on Customer's side of the delivery point, for Customer's own use, interconnected with and operated in parallel with Company's system. The generation must be located at a single premises owned, operated, leased or otherwise controlled by Customer.

Service under this Rider is closed to new participants on and after June 1, 2021. Participants served under this Rider prior to May 16, 2019, and subsequent owners of the customer-generator facility, shall remain eligible for service under this Rider until December 31, 2025, when an alternate tariff must be selected. Participants and subsequent owners of the customer-generator facility applying for service under this Rider on and after May 16, 2019 and prior to June 1, 2021 shall remain eligible for service under this Rider until May 31, 2029, when an alternate tariff must be selected. Customers requesting NEM service on and after June 1, 2021, will receive service in accordance with the NEM tariff in effect at that time.

GENERAL PROVISIONS

1. To qualify for service under this Rider, Customer must comply with all applicable interconnection standards and must provide, in writing, the Nameplate Capacity of Customer's installed renewable generation system. Any subsequent change to the Nameplate Capacity must be provided by Customer to Company in writing by no later than 60 days following the change.
2. To qualify for service under this Rider, a residential customer may be served on an approved residential rate schedule, but may not be served under Rider NM. The Nameplate Capacity of Customer's installed generation system and equipment must not exceed 20 kW AC.
3. To qualify for service under this Rider, a nonresidential customer may be served on an approved general service rate schedule, but may not be served on Schedules SGS-TES, TSS, TFS, LGS-RTP, LGS-CUR-TOU, CSG, CSE, GS, SFLS, SGS-TOU-CLR or Rider NM. The Nameplate Capacity of Customer's installed renewable generation system and equipment must not exceed 1,000 kW AC or 100% of Customer's contract demand which shall approximate Customer's maximum expected demand.
4. If Customer is not the owner of the premises receiving electric service from Company, Company shall have the right to require that the owner of the premises give satisfactory written approval of Customer's request for service under this Rider.
5. All environmental attributes, including but not limited to "renewable energy certificates" (RECs), "renewable energy credits" or "green tags", associated with the generation system shall be conveyed to Company until billing of a Distributed Energy Resource Program Rider DERP Charge is discontinued on all customer bills. Customer certifies that the environmental attributes have not and will not be remarketed or otherwise resold for any purpose, including another distributed energy

Duke Energy Progress, LLC
(South Carolina)

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resource standard or voluntary purchase of renewable energy certificates in South Carolina or in any other state or country for the Contract Period and any successive contract periods thereto.

6. If the electricity supplied to Customer by Company exceeds the electricity delivered to the grid by the customer-generator during a monthly billing period, the customer-generator shall be billed for the net electricity in kilowatt hours (kWh) supplied by Company plus any demand or other charges under the applicable rate schedule or riders.
7. Electricity delivered to the grid by Customer's renewable generation that exceeds the electricity delivered by Company during a monthly billing period is defined as Excess Energy. When used in conjunction with a time of use schedule, the TOU periods shall be specified in the applicable schedule and any Excess Energy shall apply first with the Excess Energy generated On-Peak kWh offsetting On-peak usage and then offsetting Off-peak usage. Any excess Off-Peak kWh shall only apply against Off-peak kWh usage. Any Excess Energy not used in the current month to offset usage shall carry forward to the next billing month.
8. Excess Energy shall be used to reduce electricity delivered and billed by Company during the current or a future month, except that for the March billing period any carry-over shall be compensated as described in the RATE paragraph below. In the event Company determines that it is necessary to increase the capacity of facilities beyond those required to serve Customer's electrical requirement or to install a dedicated transformer or other equipment to protect the safety and adequacy of electric service provided to other customers, Customer shall pay the estimated cost of the required transformer or other equipment above the estimated cost which Company would otherwise have normally incurred to serve Customer's electrical requirement, in advance of receiving service under this Rider.
9. The rates set forth herein are subject to Commission Order No. 2015-194, issued in Docket No. 2014-246-E pursuant to the terms of S.C. Code § 58-40-20(F)(4). Eligibility for this rate will terminate as set forth in that Order, and otherwise as specified above. The value of NEM generation eligible for this Rider shall be computed using the methodology contained in Commission Order No. 2015-194, in Docket No. 2014-246-E, and shall be updated annually by Company. The value of NEM generation for 2019 is ~~\$0.05033~~\$0.02445 per kWh for Schedules RES and R-TOUD, ~~\$0.05032~~\$0.02443 for Schedule SGS and ~~\$0.05024~~\$0.02446 for all other schedules.

RATE

All provisions of the applicable schedule and other applicable riders will apply to service supplied under this Rider, except as modified herein. For any bill month during which the Energy Charges are a net credit, the respective Energy Charges for the month shall be zero. Credits shall not offset the Basic Facilities Charge or the Demand Charge (if applicable). In addition to all charges in the applicable rate schedule for Customer's net electrical usage, the following credit may be applicable annually:

Annual Credit for Excess Generation –

If Customer has Excess Energy after offsetting usage as of the date of the March billing, Company shall pay Customer for the amount of the accumulated Excess Energy times a rate of ~~\$0.04290~~\$0.03360 per kWh, after which the amount of Excess Energy shall be set to zero.

MINIMUM BILL

The monthly minimum bill for customers receiving service under this Rider shall be no less than Basic Facilities Charge from the applicable rate schedule and riders plus, if applicable, any of the following Charges: the Demand Charge, the Off-peak Excess Demand Charge, and the Extra Facilities Charge.

METERING REQUIREMENTS

Company will furnish, install, own and maintain a billing meter to measure the kilowatt demand delivered by Company to Customer, and to measure the net kWh purchased by Customer or delivered to Company. For renewable generation capacity of 20 kW AC or less, the billing meter will be a single, bi-directional meter which records independently the net flow of electricity in each direction through the meter, unless Customer's overall electrical requirement merits a different meter. For larger renewable generation capacities, Company may elect to require two meters with 15-minute interval capabilities to separately record Customer's electrical consumption and the total generator output, which will be electronically netted for billing. Customer grants Company the right to install, operate, and monitor special equipment to measure Customer's generating system output, or any part thereof, and to obtain any other data necessary to determine the operating characteristics and effects of the installation. All metering shall be at a location that is readily accessible by Company.

SAFETY, INTERCONNECTION AND INSPECTION REQUIREMENTS

This Rider is only applicable for installed renewable generation systems and equipment that complies with and meets all safety, performance, interconnection, and reliability standards established by the Commission, the National Electric Code, the National Electrical Safety Code, the Institute of Electrical and Electronic Engineers, Underwriter's Laboratories, the Federal Energy Regulatory Commission and any local governing authorities. Customer must comply with all liability insurance requirements of the Interconnection Standard.

POWER FACTOR

Customer's renewable generation must be operated to maintain a 100% power factor, unless otherwise specified by Company. When the average monthly power factor of the power supplied by Customer to Company is other than 100%, the Low Power Factor Adjustment stated in Company's Service Regulations may be applicable. Company reserves the right to install facilities necessary for the measurement of power factor. Company will not install such equipment, nor charge a Low Power Factor Adjustment if the renewable generation system is less than 20 kW AC and uses an inverter.

CONTRACT PERIOD

Customer shall enter into a contract for service under this Rider for a minimum original term of one (1) year, and shall automatically renew thereafter, except that either party may terminate the contract after one year by giving at least sixty (60) days prior notice of such termination in writing.

Company reserves the right to terminate Customer's contract under this Rider at any time upon written notice to Customer in the event that Customer violates any of the terms or conditions of this Rider, or operates the renewable generation system and equipment in a manner which is detrimental to Company or any of its customers. In the event of early termination of a contract under this Rider, Customer will be required to pay Company for the costs due to such early termination, in accordance with Company's South Carolina Service Regulations.